

**IPSC Response to Grand Canyon Trust / Sierra Club Comment Letter on UDAQ ITA for IPP**

After a cursory review, IPSC is providing the following information in response to issues raised by the Grand Canyon Trust / Sierra Club comment letter to UDAQ's ITA for IPP. We will be following up with a formal letter for your files.

The following discussion is separated into three parts: First, we present facts about the closed permitting action on the IPP uprate project; Second, we present facts on the current permitting action; and Third, we present a concluding argument and recommendation.

**CLOSED PERMITTING ACTION REGARDING DAQE-049-02**

First, we are responding to the comments regarding the closed permit action for DAQE-049-02, which Grand Canyon Trust is attempting to invalidate as the thrust of their argument for opposing the current ITA.

**ISSUE 1:**

AO DAQE-049-02 should have had enforceable and creditable permit conditions because IPSC was "clearly" netting out of PSD. IPSC must have creditable emissions in order to avoid PSD review.

**RESPONSE:**

IPSC did not "net out" of PSD. There were no request or need by IPSC to use contemporaneous emission reductions to net out of PSD on the AO. IPSC intended all along to make actual emission reductions for each unit. IPSC clearly stated it's intent to control actual emissions to meet the WEPCO projected representative actual emissions.<sup>1</sup>

Grand Canyon Trust also misuses the term "netting" in several instances, where they imply that actual reductions in emissions constitute netting. This is, of course, incorrect. Additionally, at one point in its comments, Grand Canyon Trust concedes that net emission increases must be counted against actual emission reductions measured separately.

New enforceable or creditable emission limits are not required under WEPCO except for when contemporaneous emissions are utilized to avoid PSD review. In fact, the preamble to the WEPCO rule<sup>2</sup> and other guidance and policy documents<sup>3</sup> specifically state that this is the case.

**NOTES:**

<sup>1</sup>Refer to IPSC correspondences to UDAQ:

IPSC's Notice of Intent dated 4/4/2001,

IPSC's NOI clarification dated 9/5/2001, e-mailed to UDAQ 9/7/2001.

<sup>2</sup>See Federal Register 57FR32314, dated 7/21/1992: "The EPA does not, however, agree with comments that post-change emission estimates must always be made into permanent federally-enforceable permit conditions." (Page 32325)

<sup>3</sup>See the Detroit Edison determination from EPA to Henry Nickel, dated 5/23/2000, where it stated a utility making a change may instead of accepting permit restrictions avoid PSD under the actuals to future actuals test.

**ISSUE 2:**

Baselines were only calculated for SO2 and PM10. Data should have been compiled for all pollutants for each unit, then tallied together.

**RESPONSE:**

Pre-NOI Baseline data (for calendar years '99 and '00) were presented for all PSD regulated pollutants at IPP, including HAP's, excepting those not reasonably expected to be emitted from this facility. This data were calculated by totaling actual emissions from each unit.1

**NOTES:**

1Refer to IPSC correspondences to UDAQ:  
EXCEL worksheet Attachments to IPSC's Notice of Intent dated 4/4/2001.  
EXCEL worksheet Attachments to IPSC's e-mail to UDAQ of 9/29/01.

**ISSUE 3:**

IPSC did not provide projections for representative future actual emissions required by the WEPCO rule.

**RESPONSE:**

A full representation of post modification emissions projected for the 24 month period following the change (annualized) was included in the original 4/4/2001 NOI submittal from IPSC, and adjusted as the proposed project scope evolved. The projections included all PSD pollutants, including HAPs, that were reasonably expected to be emitted from this facility.1

**NOTES:**

1Refer to IPSC correspondences to UDAQ:  
EXCEL worksheet Attachments to IPSC's Notice of Intent dated 4/4/2001,  
EXCEL worksheet Attachments to IPSC's correction letter dated 6/7/2001,  
EXCEL worksheet Attachments to IPSC's e-mail to UDAQ of 7/26/01.  
EXCEL worksheet Attachments to IPSC's e-mail to UDAQ of 9/29/01.

**ISSUE 4:**

Projected representative actuals should include those emissions from increased hours of operations caused by the modifications.

**RESPONSE:**

IPSC has no history of forced outages caused by issues that the modifications were intended to address. In fact, most modifications were specific to increasing generation capacity at this facility. There may be some reliability issues addressed, but all of these were preventative in nature, and not tied to any forced outages. Therefore, no increased hours of operation are attributable to the permitted modifications.1

**NOTES:**

1See details of modifications and their purpose in the initial 4/4/2001 NOI, the 9/5/2001 NOI clarification, and associated e-mails and faxes of this permit action.)

**ISSUE 5:**

IPSC admitted in its NOI that the modifications will cause a net significant increase.

**RESPONSE:**

IPSC understands the implications of any net significant increase in emissions and applicability to PSD review requirements. At no time did IPSC show a projection of a net significant increase for any pollutant. IPSC acknowledged in its calculations that an increase in coal flow in and of itself could cause increases in certain pollutants. However, the project scope included methodology to control emissions below significant levels. Although the approach changed throughout the application process, the result was the same: the project would not cause a net significant increase in any pollutant.<sup>1</sup>

The WEPCO rule and policy allow this. Specifically, representative future actual emission projections can consider the "physical and operational capabilities following the change."<sup>2</sup> IPSC utilized methodologies available to it as an integral part of the uprate project to control emissions to below significant increases.

**NOTES:**

<sup>1</sup>See details of modifications and their purpose in the initial 4/4/2001 NOI, the 9/5/2001 NOI clarification, and associated e-mails and faxes of this permit action.)

<sup>2</sup>See Federal Register 57FR32314, dated 7/21/1992, Page 32323.

**ISSUE 6:**

IPSC needed the low-NOx burner replacement to meet WEPCO as part of the project.

**RESPONSE:**

Although new low-NOx burners were initially considered, IPSC ultimately chose to continue to control NOx emissions within the realm of normal operating methodologies historically available, with slight modification. We had determined, which has been proven out, that NOx is controllable on a per unit basis to levels well below any net significant increase, and modified our NOI approach accordingly.

**NOTES:**

<sup>1</sup>Refer to IPSC correspondences to UDAQ:

IPSC's Notice of Intent dated 4/4/2001,

IPSC's NOI clarification dated 9/5/2001 and e-mailed 9/7/2001 where new LNB's were dropped from the NOI.

**ISSUE 7:**

The AO included new federally enforceable limits to essentially ensure no significant increase, appearing to make an "allowable to allowable" comparison. UDAQ should have required lower limits to meet WEPCO.

**RESPONSE:**

New permit conditions with lower federally enforceable limits ensure that the facility potential-to-emit (PTE) does not increase, yet still allow operating flexibility. Limiting all emissions to WEPCO levels at no net significant increases is not practical. The requirement under WEPCO1 is that there are not any significant increases due to the modifications. Increases not associated with the project are excluded from the net significant increase determinations. Since the uprate project increased capacity, new limits were put in place to maintain current PTE only, and must still be met regardless of whether emissions are from the modification or not. This allows IPP to be operated to allowable emission levels above WEPCO when emissions are not associated to the project, yet keeps those allowable limits to less than significant levels overall.

**NOTES:**

1See both Federal Register 57FR32314, dated 7/21/1992 and the Detroit Edison determination from EPA to Henry Nickel, dated 5/23/2000.

**ISSUE 8:**

The uprate modification permit should have undergone a BACT analysis.

**RESPONSE:**

Utah State statute requires a BACT review that includes a review of current permitting already founded in BACT. UDAQ policy specifically states that a complete BACT analysis is required except when an existing BACT determination and approval is applicable to the source and acceptable to UDAQ.<sup>1</sup>

Therefore, DAQ must have surmised current technology at IPP met BACT for this project with the following considerations for NO<sub>x</sub> and SO<sub>2</sub>, which it is obviously allowed to do. First, SO<sub>2</sub> emission rates are currently meeting or exceeding BACT technology anywhere in the country. Secondly, since the permitting action results in zero emission increases, any expense for BACT causes an inordinate cost per ton ratio. Additional cost review with DAQ showed an excessive expense in capitalization of presumed BACT. Specifically for NO<sub>x</sub>, the \$150 million retro-fit price tag for SCR's on a \$30 million project was overly burdensome, and disqualifies that technology from consideration.

**NOTES:**

<sup>1</sup>For detailed description of this, please refer to UDAQ's NSR NOI Guide on BACT.

**ISSUE 9:**

The BACT analysis for NOx burners was inadequate in its cost estimations.

**RESPONSE:**

IPSC proposed replacement of the burners for several reasons. One was the increasing deterioration of the current burners. Although IPSC believed that current burners could easily meet the proposed capacity increase, replacement as part of the uprate project could not be justified as replacement-in-kind. Therefore IPSC sought to have the burner replacement permitted as part of the project. However, Utah regulations require burners to be current technology burners that meet BACT. Since BACT analysis for burner replacement required the addition of OFA, IPSC scrubbed its request to permit burners as part of the uprate project.<sup>1</sup> Although IPSC believed we had the capability to meet WEPCO with our current unit configuration, another consideration to justify current technology burners was to meet WEPCO requirements if needed. The burner additions were scrapped completely so that they may be reviewed on their own merit.

IPSC clearly indicated in its revised NOI that WEPCO could be met without LNBs and OFA. We have since operated (for over 22 months) at newly modified capacity with current burners and have easily met the WEPCO rule's actuals to future actuals test.

Since the BACT analysis was to determine the adequacy of the new LNB's only, IPSC's methods utilizing incremental cost analysis (in dollars per ton of pollutant removed) to meet WEPCO was appropriate.

**NOTES:**

<sup>1</sup>Refer to IPSC correspondences to UDAQ:

IPSC's Notice of Intent dated 4/4/2001,

IPSC's NOI clarification dated 9/5/2001, e-mailed to UDAQ 9/7/2001.

**ISSUE 10:**

UDAQ did not follow its own rules when issuing the uprate permit.

**RESPONSE:**

As detailed above, UDAQ met all requirements for the permitting process in issuing DAQE-049-02. The basis for each issue raised by the Grand Canyon Trust comment letter has been refuted.

**CURRENT PERMITTING ACTION**

The following issues were presented by Canyon Trust on the current permitting action:

**ISSUE 1:**

Grand Canyon Trust's arguments indicate that IPSC needs to add OFA to meet the WEPCO rule's actuals-to-future actuals test and to meet the federally enforceable limits established by DAQE-049-02.

**RESPONSE:**

IPSC does not need the OFA nor LNB's to meet WEPCO. IPSC has already demonstrated that it is meeting and can continue to meet WEPCO within the configuration approved under DAQE-049-02.

IPSC never intended to add OFA in its original uprate package. In fact, IPSC purposely removed the change-out of LNB's specifically because of BACT analysis showing OFA to be required.<sup>1</sup> IPSC's intent in its current NOI was to add OFA to forestall the impacts from deteriorating coal quality and to meet forthcoming limit reductions in Acid Rain and new legislation. IPSC also was intending to meet WEPCO outright without regard to emissions that can be excluded from WEPCO accounting, such as deteriorating coal quality. However, IPSC is now determined to utilize all exclusions allowed under WEPCO and adjust emission calculations accordingly, so OFA will not be used to account for that adjustment.

The federally enforceable limits set in DAQE-049-02 to limit PTE are of another matter. As Grand Canyon Trust pointed out, the historical baseline emission rates can not be exceeded by a net significant amount due to the modification. However, emission increases not caused by the uprate project are excluded from this limitation, and IPSC can emit up to any federally enforceable limit.<sup>2</sup> IPSC predicts that with deteriorating coal quality in Utah coal mines, those limits may become difficult to attain without additional combustion controls. Further, besides the Acid Rain limitations, IPSC predicts that more stringent federal regulations are on the horizon which will lower allowable emission rates further. OFA is being added in preparation for such legislation.

LNB's are also not required to meet WEPCO. Further, IPSC has demonstrated that the current burners can attain the uprated boiler capacity. Therefore, replacement of the burners due to obsolescence is replacement in kind.

**NOTES:**

<sup>1</sup>Refer to IPSC correspondences to UDAQ:

IPSC's Notice of Intent dated 4/4/2001,

IPSC's NOI clarification dated 9/5/2001, e-mailed to UDAQ 9/7/2001.

<sup>2</sup>See Federal Register 57FR32314 dated 7/21/1992 and the Detroit Edison determination from EPA to Henry Nickel, dated 5/23/2000.

**ISSUE 2:**

The uprate project permitting in DAQE-049-02 and the current permitting action should have been permitted as a single project.

**RESPONSE:**

This is not the case. IPSC has provided a detailed discussion summarizing the process as documented in its correspondences with UDAQ. Of special note is that IPSC did not want OFA in its original modification, and rejected LNB change out accordingly. While both permitting actions are close in approximation both in time and in association to unit operation, separate permitting is still appropriate and necessary. Although obsolescence of the burners was predicted, IPSC felt that their replacement were best approached under separate permitting considerations. OFA, however, was not a consideration until IPSC recognized that coal quality was to become a significant operating issue.<sup>1</sup>

Further, nothing in federal or state regulatory framework prevents separate permitting of closely associated modifications that "are not otherwise significant."<sup>2</sup> To prevent circumvention, an analysis of accumulation of emissions from several closely related projects must be performed to show that their combined expected emissions increases do not trigger major review under PSD. As IPSC has clearly presented in its NOI's and associated correspondences, no circumvention has occurred. Those emissions major in nature have undergone the required PSD review. Emissions minor in nature, combined across all proposed modifications, are still minor, and PSD is thusly appropriately and legally avoided.

**NOTES:**

<sup>1</sup>Refer to IPSC correspondences to UDAQ:

IPSC's Notice of Intent dated 4/4/2001,

IPSC's NOI clarification dated 9/5/2001, e-mailed to UDAQ 9/7/2001.

<sup>2</sup>See the EPA Draft NSR Manual, Section III.B.1 on Accumulation of Emissions.

## CONCLUSION

The simplest way to clarify the connection between the current permitting action and the uprate permit as to whether they should be joined, is to perform a three-part virtual test.

**Question 1:** Are new LNB's and OFA needed to meet WEPCO for the uprate project?

**Answer:** No. If current burners weren't predicted to fail, and coal quality was not changing, neither new LNB's nor OFA would be necessary at this time.

**Question 2:** Given the current burner status and coal quality issue, would IPSC still need to install new replacement burners and OFA if the uprate project never occurred?

**Answer:** Yes. The burners are reaching the end of their life. IPSC is taking a proactive approach to replace them before we begin experiencing forced outages due to burner failures. Additionally, deteriorating coal quality is placing IPSC in the position to find some way to meet emission limits for NO<sub>x</sub> for both NSPS and Acid Rain. This would be the same issue even if we were still operating at the old NSPS limit of 0.50 lb/mmBtu that was in place before the project.

**Question 3:** Taken together, would the uprate project and the current permitting action, if combined, be otherwise significant for the pollutants of concern to Grand Canyon Trust?

**Answer:** No. The uprate project and the current burner replacement ITA are minor in overall configuration. The OFA is major for CO, and PSD was performed for it, but OFA was not part of the uprate project, nor was it needed to meet WEPCO. If the projects were combined at the outset and included OFA, the permitting would still have been minor for all pollutants except OFA.

Therefore, IPSC has clearly shown that the UDAQ has properly permitted the original uprate modifications, and the current ITA is appropriate for the current permit action.

## RECOMMENDATION

Since the bases for the Grand Canyon Trust arguments have been refuted, IPSC can see no reason why UDAQ should not issue the approval order to complete the current permitting action, and recommends that UDAQ proceed accordingly.

Additionally, since IPSC has always intended to meet WEPCO for the uprate project, we will discount the effects of OFA reductions to NO<sub>x</sub> in its compliance calculations when reporting under condition 25 of DAQE-049-02. By doing this, IPSC can continue to clearly demonstrate meeting the actuals to future actuals test for those emissions associated with the uprate. That condition requires IPSC to monitor emission increases due to the project to ensure that they are not significant. Since IPSC has good operating data from which to project these emissions, and since the WEPCO rule allows it,<sup>1</sup> we also recommend that UDAQ recognizes this requirement as part of Condition 25.

### NOTES:

<sup>1</sup>See Federal Register 57FR32314, dated 7/21/1992, page 32325 states that post-change monitoring must "provide a reasonable means of determining whether a significant increase in representative actual emissions" occurs due to the project.